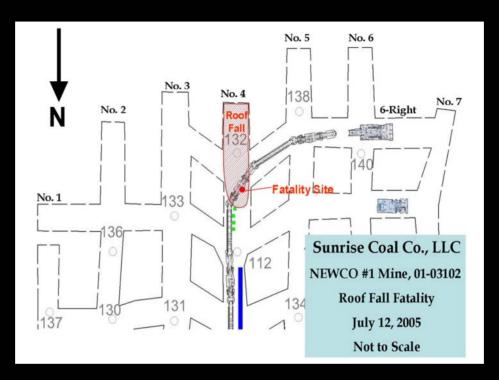
This presentation is for illustrative and general educational purposes only and is not intended to substitute for the official MSHA Investigation Report analysis nor is it intended to provide the sole foundation, if any, for any related enforcement actions.

Coal Mine Fatal Accident 2005-10



Operator: Sunrise Coal Company, LLC

Mine: NEWCO #1 Mine

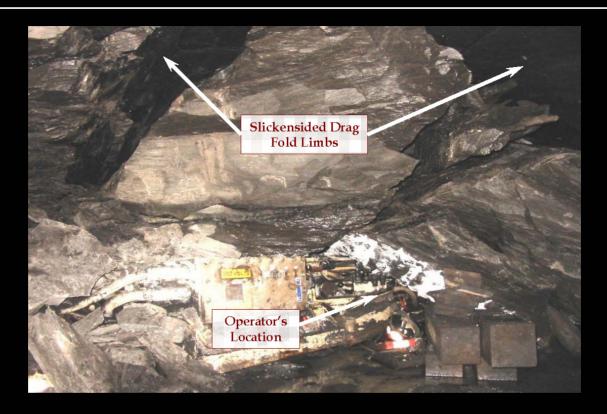
Accident Date: July 12, 2005 Classification: Fall of Roof

Location: Dist. 11, Jefferson Co., Alabama

Mine Type: Underground

Employment: 43

Production: 1,300 tons/day



At ~10:45 a.m. on Tuesday, July 12, 2005, a 28-year old mobile bridge conveyor operator was fatally injured in a roof fall. The victim, positioned in an intersection under permanently supported roof, was operating the No. 3 mobile bridge conveyor when a drag fold (horseback) fell in the intersection and inby toward the face. The victim had 13 months total mining experience, all at the NEWCO #1 Mine, and 12 months experience as a mobile bridge conveyor operator.

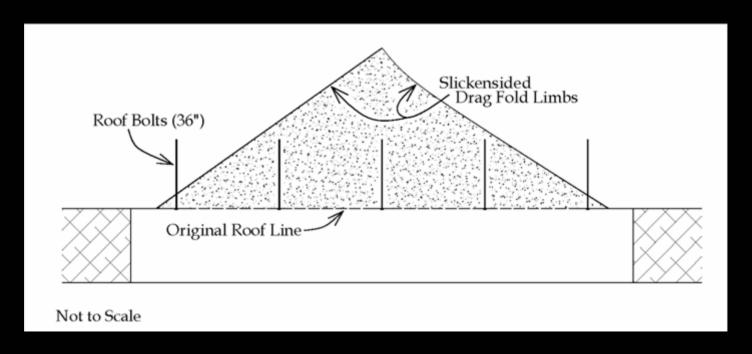
ROOT CAUSE ANALYSIS

<u>Causal Factor</u>. The operator failed to recognize adverse roof conditions that would have prompted installation of longer roof bolts on reduced centers and reduction in entry width in compliance with the approved roof control plan. The presence of a slickensided drag fold (horseback) running nearly parallel to the No. 4 entry was not identified by mine personnel. The maximum thickness of the wedge block beneath the drag fold exceeded roof bolt anchorage by three to five feet. Roof competency was further degraded by localized areas of water inflow. The primary roof support system was not adequate to prevent the roof fall.

Corrective Actions: The operator is in the process of abandoning the NEWCO #1 Mine. However, the operator has acquired another mine and has requested that Technical Support conduct hazard mapping to identify potential roof problems. This will assist the operator by providing knowledge and awareness of potential hazards that can be expected at the mine. Hazard mapping will also provide miners and management with the knowledge needed to identify potential roof problems on working sections and in outby areas so that suitable support can be used to prevent roof failures. Hazard mapping will be recommended and should be conducted if the mine associated with I.D. No. 01-03102 is re-opened for operations in the future.

CONCLUSION

The accident occurred because the operator did not recognize the presence of a drag fold (horseback) and failed to comply with provisions of the approved roof control plan regarding specific actions to be taken when adverse roof conditions, including horsebacks, were encountered. The victim was located in a permanently supported intersection when the roof failed above the anchorage horizon of the roof bolts. The primary support system was not adequate to prevent the roof fall.



ENFORCEMENT ACTIONS

A 104(a) citation was issued for a violation of 75.220(a)(1).

The operator failed to comply with item 6 on page 16 of the current Roof Control Plan approved November 12, 2004, and granted continuing approval on May 25, 2005, following a six-month review. This item specified that the operator was to take the following actions when adverse roof conditions, including horsebacks, were encountered: 1) reduce opening width to 18 feet by installing crossbars or J- channels across the opening on posts or cribs on 4-foot centers and 2) install roof bolts longer than 4 feet long on centers less than 4 feet.

One miner received fatal injuries on July 12, 2005, when a drag fold (horseback) fell out of the roof in the intersection just outby the No. 4 (belt) entry face near survey spad 132 on the 2nd Left Section (MMU 001-0). The outby end of the roof fall was approximately 34 feet inby survey spad 112 and the fall was estimated to have extended to the No. 4 face, a total distance of 75 to 80 feet. The outby end of the fall extended across the entry to within a few feet of the rib lines and appeared to span the entry from rib to rib, a width of approximately 22 feet, inby the survey spad 132 intersection. The fall was estimated to be 6 to 8 feet above the mine roof. The primary roof support system, consisting of 3-foot long, 5/8- inch diameter, grade 40 resin-grouted roof bolts installed on 5-foot maximum centers, was not adequate to support the roof. The operator had not implemented the provisions specified in item 6 on page 16 of the approved Roof Control Plan for supporting areas where adverse roof conditions, including horsebacks, are encountered.

BEST PRACTICES

- Know and follow the approved roof control plan.
- Make frequent roof examinations and be alert to changing conditions at all times.
- Install additional roof support when adverse conditions are encountered or anticipated.
- Install and examine test holes regularly for changes in roof strata.
- Train all miners on the importance of roof examinations.
- Map all known geologic structures and anomalies to determine orientation as a means to predict when and where they will be encountered during mining.